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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR       | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--|-------------|----------------------------|----------------------|------------------|
| 10/573,066   | 10/24/2006  | Ulrike Wachendorff-Neumann | 2400.0230000/VLC/CMB | 6965             |
| 26111 7590 12/30/2009<br>STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.<br>1100 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                            | EXAMINER             |                  |
|  |             |                            | PIHONAK, SARAH       |                  |
| WASHINGTON, DC 20003   |             |                            | ART UNIT             | PAPER NUMBER     |
|  |             |                            | 1627                 |                  |
|  |             |                            |                      |                  |
|  |             |                            | MAIL DATE            | DELIVERY MODE    |
|  |             |                            | 12/30/2009           | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | olication No. Applicant(s)  |  |  |  |  |
|--|---|---|--|--|--|--|
| Office Action Summary  | 10/573,066  | WACHENDORFF-NEUMANN ET AL.  |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |  |  |  |  |
|  | SARAH PIHONAK   | 1627  |  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the o  | orrespondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 16 Se   | eptember 2009.  |   |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☑ This   | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |  |  |  |  |
| 3) Since this application is in condition for allowar  | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |   |  |  |  |  |
| Disposition of Claims  |   |   |  |  |  |  |
| 4)⊠ Claim(s) <u>4,13 and 14</u> is/are pending in the application.   |   |   |  |  |  |  |
| 4a) Of the above claim(s) <u>13 and 14</u> is/are withdrawn from consideration.  |   |   |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |   |  |  |  |  |
| 6)⊠ Claim(s) <u>4</u> is/are rejected.   |   |   |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.   |   |  |  |  |  |
| Application Papers   |   |   |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |   |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:   |   |   |  |  |  |  |
| <ol> <li>Certified copies of the priority documents have been received.</li> </ol>   |   |   |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |   |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  |   |   |  |  |  |  |
| * See the attached detailed Office action for a list   | of the certified copies not receive   | ed.   |  |  |  |  |
|  |   |   |  |  |  |  |
| Attachment(s)  | _   |   |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 4) 🔲 Interview Summary<br>Paper No(s)/Mail Da   |   |  |  |  |  |
| Notice of Drattsperson's Patent Drawing Review (P10-948)     Information Disclosure Statement(s) (PTO/SB/08)   | 5) Notice of Informal F   |   |  |  |  |  |
| Paper No(s)/Mail Date  | 6) 🔲 Other:   |   |  |  |  |  |

#### **DETAILED ACTION**

This application is a national stage entry of PCT/EP04/10830, filed on 9/28/2004.

## **Priority**

This application claims foreign priority to Application No. 103-47-090.5, filed on 10/10/2003.

# **Request for Continued Examination**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/16/2009 has been entered.

#### **Response to Remarks**

2. Applicant's arguments filed 9/16/2009 have been considered but they are not fully persuasive. In the office action dated 6/16/2009, claims 4 and 15-16 were rejected under 35 USC § 103(a) as being unpatentable over Bruns et. al., US PG Publication No. 2002/0198222, in view of Dunkel et. al., DE 10215292 patent application. The Applicants have argued that Bruns et. al. teaches pesticide compounds which are not carboxamides, and that Dunkel teaches pyrazolyl carboxamide derivatives; as these pesticides are of different classes of compounds, one of ordinary skill in the art would not have been motivated to substitute the compounds taught by Dunkel for the pesticide compounds taught by Bruns. Additionally, the Applicants have amended the claims to

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be drawn to a synergistic composition comprising the carboxamide N-(3',4'-dichloro-5fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide and at least one triazole compound, in a ratio of 50:1 to 1:50 of carboxamide to triazole. While the Applicant's amendment has been considered, it is not commensurate in scope with the support provided by the specification. It is noted that on p. 70, Table 21 of the specification, the Applicants have stated that the preferred mixing ratio for carboxamides and triazoles is between 50:1 to 1:50. However, for the results which demonstrate synergy, the only observed ratio between N-(3',4'-dichloro-5-fluoro-1,1biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide and propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol is 1:1 (p. 19, Table A; p. 80, Table B; p. 83, Table D; p. 86, Table E). Therefore, as the specification shows only the synergistic results of a 1:1 ratio between N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide and the claimed triazole compounds, and presents no other data of different weight ratios between the claimed range of 50:1 to 1:50, the claims are not fully supported by the specification. In further consideration of the amended claims, the rejection under 35 USC § 103(a) in view of Bruns et. al. and Dunkel et. al. is withdrawn; however, a new art rejection has been made, which will be discussed in detail further in this office action. However, it is noted that if the Applicants were to amend the claims to reflect the weight ratio of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1Hpyrazole-4-carboxamide and propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol as supported by the specification, or to provide additional

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data to support the currently amended claims, such amendments would be considered by the examiner.

Claims 15-16 have been cancelled by the Applicants. Claims 13-14 were previously withdrawn due to the restriction requirement. In the event that claim 4 is found allowable, a rejoinder of the method claims with claim 4 will be considered.

- 3. Claim 4 was examined.
- 4. Claim 4 was rejected.

# Claim Rejections-35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dunkel et. al., DE 10215292 patent application. For convenience, the English language equivalent of DE 10215292, CA Patent Application No. 2476462, will be referenced in this office action.

Claim 4 is drawn to a synergistic composition comprised of the compound N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide, and at least one triazole selected from propiconazole, epoxiconazole, prothioconazole, tebuconazole, or bitertanol, in a ratio of 50:1 to 1:50 of carboxamide to triazole.

Dunkel et. al. teaches carboxamide compounds as pesticidal agents effective for crop protection (Abstract; p. 1, lines 4-6, and lines 13-22; p. 20, lines 25-27). Dunkel et. al. teaches the claimed carboxamide compound, N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide (p. 52, Table C, compound 11). Dunkel et. al. teaches the formulation of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with carriers, extenders, and solvents (p. 25, line 7-p. 26, line 2). Additionally, Dunkel et. al. teaches that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-

pyrazole-4-carboxamide can be combined in a mixture with other known fungicides or insecticides, and, in many cases, a synergistic effect is observed (p. 26, lines 18-23). Particularly, it is taught that the combination of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with other known insecticides or fungicides can broaden crop protection and prevent the development of resistance (p. 26, lines 18-23). Dunkel et. al. teaches that suitable fungicides to be mixed together with N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide include bitertanol (p. 26, lines 25 and 32), epoxiconazole (p. 27, line 10), prothioconazole (p. 27, lines 31-32), propiconazole (p. 27, line 31), and tebuconazole (p. 28, line 4).

Dunkel et. al. teaches that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide is an effective agent for protecting crops from many different microorganisms, and that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide can be mixed together with other fungicidal agents such as propiconazole, epoxiconazole, prothioconazole, tebuconazole, and bitertanol to provide a synergistic effect. As such, it would have been prima facie obvious to one of ordinary skill in the art, at the time of the invention, to combine N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide with the claimed triazoles to obtain a synergistic composition to protect crops from pests, fungi, and many other microorganisms. Dunkel et. al. does not explicitly teach that N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide is combined with the claimed

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triazole compounds in a ratio from 50:1 to 1:50; however, it would have been considered routine for one of ordinary skill in the art to determine optimum weight ratio ranges of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide to triazole compounds for an enhanced pesticidal and fungicidal effect. As the development of optimum working ranges would have been considered routine to one of ordinary skill in the art, it would have been prima facie obvious, at the time of the invention, to establish a weight ratio range of N-(3',4'-dichloro-5-fluoro-1,1-biphenyl-2-yl)-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide to triazole compounds between 50:1 and 1:50.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-every other Friday 8:00 AM - 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627